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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,400	07/28/2003	Paul J. Timans	MAT-9	7216
21833	7590	12/15/2005	EXAMINER	
PRITZKAU PATENT GROUP, LLC			FUQUA, SHAWNTINA T	
993 GAPTER ROAD			ART UNIT	
BOULDER, CO 80303			PAPER NUMBER	

3742

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/629,400	TIMANS ET AL.	
	Examiner	Art Unit	
	Shawntina T. Fuqua	3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-48, 60-108 and 121-136 is/are pending in the application.
- 4a) Of the above claim(s) 18-30, 36-40, 46, 47, 78-90, 96-100, 106 and 107 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-48, 60-108, 121, 135 and 136 is/are allowed.
- 6) ☒ Claim(s) 122-134 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 122-134 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roozeboom et al (US6047107).

Roozeboom et al discloses a system/method for heating/cooling a treatment object via selective reflectivity comprising a heating arrangement (9) for heating object via radiated energy wherein heat source emission spectrum is different from emission spectrum of the object (column 4, lines 47-64), a chamber defining means (15, 17) for use in exposing object to radiated energy such that a first and second fraction of radiated energy are incident on a wall (3, 15, 17) and wall is configured for responding in a first way to first fraction and responding in a second way to a second fraction of radiated energy (column 4, lines 47-64), wall is configured to reflect and absorb (column 2, lines 16-31; column 3, lines 30-40), wall includes an inner layer that responds in a second way (15, 17; 2, 4, 6, 8, 10; Figures 1-2) with a thickness from 1 nm to 1.5 mm (column 2, lines 59-62), walls are metallic (column 5, line 42), inner layer includes aluminum oxide and titanium oxide (column 4, lines 4-7, 12-15), inner layer includes a polymer (column 3, lines 55-65) and a glass filler (column 3, lines 66-67) that modify the selective reflectivity (column 3, lines 49-54), wall includes a single layer (15, 17), at least two layers, or a

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thin film stack (2, 4, 6, 8, 10) directly attached to one another (Figure 2), and a wall arrangement covers at least 20% of total surface area (Figure 1).

Roozeboom et al discloses all of the recited subject matter except walls which reflect at least 60% and more than 75% of heat source radiated energy and absorbs at least 60% and more than 75% of object radiated energy, aluminum walls, and walls having a surface roughness. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included walls which reflect at least 60% and more than 75% of heat source radiated energy and absorbs at least 60% and more than 75% of object radiated energy, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In addition, aluminum walls and walls with a surface roughness are conventional and well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included aluminum walls and a surface roughness on the walls as a means to heat/cool the walls more uniformly.

#### *Allowable Subject Matter*

3. Claim 1-48, 60-108, 121, and 135-136 are allowed.

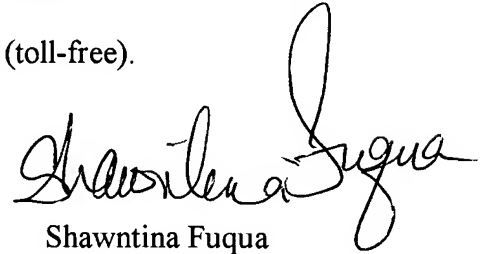
#### *Conclusion*

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawntina T. Fuqua whose telephone number is (571) 272-4779. The examiner can normally be reached on Monday-Friday 8-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (571) 272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

stf  
December 12, 2005



Shawntina Fuqua  
Patent Examiner  
Art Unit 3742